

## CIRCULAR LETTER: DHCQ 99-8-395

To: Hospital Administrators, Long-Term Care Facilities

From: Paul I. Dreyer, Ph.D., Director

Date: August 5, 1999

Re: Best Practice Recommendation #2:  
Methods to facilitate the appropriate administration of morphine sulfate.

This is the second in a series of Best Practice Recommendations from the Department of Public Health, Division of Health Care Quality ("Division"). The purpose of these recommendations is to assist facilities in their efforts to reduce medication errors in Massachusetts long-term care facilities.

Several of the medication errors that the Division has investigated in the past three years have resulted from the failure to properly administer morphine sulfate. Specifically, many errors were the result of the administration of the incorrect dosage of morphine due to a miscalculation by the person who administered the medication. These errors resulted in serious harm to residents of the facilities. In response to these errors, the Division strongly recommends that each facility:

- Work with its consultant pharmacist to encourage prescribers to prescribe the strength of morphine sulfate that is the least complex for the nurse to convert to the prescribed dose.
- Work with its consultant pharmacist to standardize the strengths of morphine sulfate that are ordered by the facility and dispensed by the pharmacy. Such standardization might include using manufacturers' original packaged syringes for injectable morphine sulfate (not multidose syringes), where appropriate, in order to minimize dosing calculations.
- Use the enclosed morphine conversion charts as an aid in the administration of morphine. The charts should be posted where medication is prepared for administration and used in order to double check calculations that are made when converting from milligrams of morphine ordered to milliliters of morphine administered.

Enclosed you will find the following:

1. **Emergency Kit Conversion Chart-** a conversion chart for insertion in the facility Emergency Kit. This conversion chart lists the milligram and milliliter dosages of the morphine sulfate strengths that are available in most emergency kits.
2. **Oral Morphine Sulfate Conversion Chart-** this conversion chart provides the milligram and milliliter dosages of the three most commonly dispensed strengths of morphine sulfate that are administered orally.

3. **Morphine Sulfate Conversion Chart for SC & IM Administration-** this conversion chart provides the milligram and milliliter dosages of the three most commonly dispensed strengths of morphine sulfate that are administered by subcutaneous or intramuscular injection.

The Division urges all licensed long term care facilities to familiarize themselves with these tools, to incorporate them into their medication administration policies and procedures, and to use these or other equivalent tools as part of their overall medication administration process. The Advisory Committee will continue to work to assist facilities in their efforts to reduce medication errors in long-term care facilities in the Commonwealth.

If you have any further questions, please contact your regional manager at (617) 753-8000.